



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 09/897,732   | 07/03/2001  | Jae-Hong Kim           | Q63316              | 8188             |
| 7590 04/24/2008<br>SUGHRUE, MION, ZINN,<br>MACPEAK & SEAS, PLLC<br>2100 Pennsylvania Avenue, NW<br>Washington, DC 20037-3213 |             |                        |                     |                  |
| EXAMINER<br>KIM, KEVIN   |             |                        |                     |                  |
| ART UNIT<br>2611   |             | PAPER NUMBER           |                     |                  |
| MAIL DATE<br>04/24/2008  |             | DELIVERY MODE<br>PAPER |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/897,732

**Applicant(s)**

KIM ET AL.

**Examiner**

Kevin Y. Kim

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 is/are allowed.
- 6) ☒ Claim(s) 1,4 and 10 is/are rejected.
- 7) ☒ Claim(s) 2,3,4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed October 1, 2007 have been fully considered but they are not persuasive.

Applicant argues that the Frame Decision (759) determines the frame length. Although this observation is correct that does not change the fact that the Selector (731) illustrated in Fig.9 of the prior art reference (US 6,438,119), read as "a decoded data output part," selectively outputs data that correspond to a frame length detected from the input data which has not been decoded by the preliminary coding part. In other words, the 2ND FRAME DETECTOR (20ms) and 1ST FRAME DETECTOR (20 ms) of the '119 patent function to help to determine the frame length from the input data which has not been decoded by the preliminary coding part. The input data used to detect the frame length comes from the DIVERSITY COMBINER (713), which input data "has not been decoded."

Applicant further argues the Kim et al patent fails to anticipate the claimed invention because according to Table 6 the frame determiner outputs a DISABLE signal because the CRC 5 detector outputs a false signal. However, this description does not change that selective outputting of data "corresponds" to a frame length detected from the input data by the frame detectors (741,743). In other words, because of the broad language of "that corresponds to a frame length," the claim does not limit the selective outputting of data solely using the frame length detected from the input data which has not been decoded by the preliminary decoding part. As long as a prior art shows a correspondence between the frame length detected from

non-decoded input data and the selective outputting of data, the prior art meets the scope defined by the claim. In this case, regardless of the operation of CRC detectors, there is a correspondence between the frame length determined from non-decoded input data and the selective outputting of the decoded data.

The Office action of March 12, 2007 was meant to be a final Office action and thus recorded as such. However, the action fails to indicate it was a final Office action. Thus, the communication of June 21, 2007 by Applicant was treated as an after-final amendment and an advisory action was mailed in response to the communication of June 21, 2007.

Since applicant was not properly notified the finality status of The Office action of March 12, 2007. The the communication of June 21, 2007 is now treated as a response to a non-final Office action. This Office action is a final Office action in response to the communication of June 21, 2007.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1,4 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al (US 6,438,119 cited previously).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Kim et al discloses an apparatus (see Fig.9) for decoding data of unknown frame length, comprising:

a preliminary decoding part (721,723) for decoding input data into preliminarily decoded data according to each of the possible frame lengths; and

a decoded data outputting part (731) for selectively outputting data that correspond to a frame length detected from the input data which has not been decoded by the preliminary coding part, from among the preliminarily decoded data which are decoded by the preliminary decoding part according to each of the possible frame lengths. Note the frame length is detected by first and second frame detectors (741,743) which detects the frame length from the input data (out of diversity combiner 713, thus before decoded) which has not been decoded by the the preliminary coding part.

#### ***Allowable Subject Matter***

4. Claims 6-9 are allowed.
5. Claims 2,3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Y Kim/  
Primary Examiner, Art Unit 2611